Health Canada Santé Canada

Your health and safety... our priority. *Votre santé et votre sécurité... notre priorité.*

Proposed Maximum Residue Limit PMRL2015-41

Metrafenone

(publié aussi en français)

16 October 2015

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

Publications
Pest Management Regulatory Agency
Health Canada
2720 Riverside Drive
A.L. 6607 D
Ottawa, Ontario K1A 0K9

Internet: pmra.publications@hc-sc.gc.ca
healthcanada.gc.ca/pmra
Facsimile: 613-736-3758
Information Service:
1-800-267-6315 or 613-736-3799
pmra.infoserv@hc-sc.gc.ca

Canada

ISSN: 1925-0835 (print)
1925-0843 (online)

Catalogue number: H113-24/2015-41E (print version)
H113-24/2015-41E-PDF (PDF version)

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2015

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.

Under the authority of the *Pest Control Products Act*, Health Canada's Pest Management Regulatory Agency (PMRA) has concluded that the addition of new uses on hops, and crops in Crop Group 9 (Cucurbit Vegetables), Crop Subgroup 12-09A (Cherry Subgroup), Crop Subgroup 12-09B (Peach Subgroup), Crop Group 8-09 (Fruiting Vegetables), and Crop Group 11-09 (Pome Fruit) to the product label of VIVANDO™ SC FUNGICIDE, containing technical grade metrafenone, is acceptable. The specific uses approved in Canada are detailed on the label of VIVANDO™ SC FUNGICIDE, *Pest Control Products Act Registration* Number 29765.

The evaluation of these metrafenone applications indicated that the end-use product has value and the human health and environmental risks associated with the new uses are acceptable.

Before registering a pesticide for food use in Canada, the PMRA must determine the quantity of residues that are likely to remain in or on the food when the pesticide is used according to label directions and that such residues will not be a concern to human health. This quantity is then legally established as a maximum residue limit (MRL). An MRL applies to the identified raw agricultural food commodity as well as to any processed food product that contains it, except where separate MRLs are specified for the raw agricultural commodity and a processed product made from it.

In addition, the PMRA is proposing to establish MRLs for metrafenone on Amur River grapes, gooseberries, hardy kiwifruit, maypop, and Schisandra berries to permit the import and sale of food containing such residues. The PMRA must determine the quantity of residues that are likely to remain in or on the imported food commodities when metrafenone is used according to label directions in the exporting country, and that such residues will not be a concern to human health. This quantity is then legally established as an MRL on the corresponding imported commodity.

Consultation on the proposed MRLs for metrafenone is being conducted via this document (see Next Steps, the last section of this document). A summary of the field trial data used to support the proposed MRLs can be found in Appendix I.

To comply with Canada's international trade obligations, consultation on the proposed MRLs is also being conducted internationally by notifying the World Trade Organization, as coordinated by the Canada's Notification Authority and Enquiry Point.

The proposed MRLs, to be added to the MRLs already established for metrafenone, are as follows.

Table 1 Proposed Maximum Residue Limits for Metrafenone

Common Name	Residue Definition	MRL (ppm)[1]	Food Commodity
Metrafenone	(3-bromo-6-methoxy-2-methylphenyl)(2,3,4-trimethoxy-6-methylphenyl)methanone	70	Hops (dried)
		4.5	Amur River grapes, gooseberries, hardy kiwifruit, maypop, and Schisandra berries
		4.0	Apple sauce
		2.0	Cherry Subgroup (Crop Subgroup 12-09A)
		1.5	Pome Fruit (Crop Group 11-09)
		0.7	Fruiting Vegetables (Crop Group 8-09), Peach Subgroup (Crop Subgroup 12-09B)
		0.5	Cucurbit Vegetables (Crop Group 9)

[1] ppm = parts per million

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides and Pest Management section of Health Canada's website.

MRLs established in Canada may be found using the Maximum Residue Limit Database on the Maximum Residue Limits for Pesticides webpage. The database allows users to search for established MRLs, regulated under the *Pest Control Products Act*, both for pesticides or for food commodities.

International Situation and Trade Implications

MRLs may vary from one country to another for a number of reasons, including differences in pesticide use patterns and the locations of the crop field trials used to generate residue chemistry data.

Table 2 compares the MRLs proposed for metrafenone in Canada with corresponding American tolerances. American tolerances are listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide.

Currently, there are no Codex MRLs[1] listed for metrafenone in or on any commodity on the Codex Alimentarius Pesticide Residues in Food website.

Table 2 Comparison of Canadian MRLs, American Tolerances and Codex MRLs (where different)

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Apple sauce	4.0	Not Established	Not Established
Fruiting Vegetables (Crop Group 8-09)	0.7	0.9	

Next Steps

The PMRA invites the public to submit written comments on the proposed MRLs for metrafenone up to 75 days from the date of publication of this document. Please forward your comments to Publications (see the contact information on the cover page of this document). The PMRA will consider all comments received before making a final decision on the proposed MRLs. Comments received will be addressed in a separate document linked to this PMRL. The established MRLs will be legally in effect as of the date that they are entered into the Maximum Residue Limit Database.

[1] The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

Appendix I

Summary of Field Trial Data Used to Support the Proposed Maximum Residue Limits

Residue data from field trials conducted in the United States were submitted to support the domestic use of VIVANDO™ SC FUNGICIDE on hops, and crops in Crop Group 9 (Cucurbit Vegetables), Crop Subgroup 12-09A (Cherry Subgroup), Crop Subgroup 12-09B (Peach Subgroup), Crop Group 8-09 (Fruiting Vegetables) and Crop Group 11-09 (Pome Fruit). Metrafenone was applied to hops, cantaloupes, cucumbers, summer squash, cherries, peaches, tomatoes, bell peppers, non-bell peppers, apples, and pears, and harvested according to label directions. Previously reviewed residue data from field trials conducted in/on grapes were also reassessed in the framework of this petition. In addition, processing studies in treated tomatoes and apples were reviewed to determine the potential for concentration of residues of metrafenone into processed commodities.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for metrafenone was based upon the submitted field trial data for hops, cantaloupes, cucumbers, summer squash, cherries, peaches, tomatoes, bell peppers, non-bell peppers, apples, and pears, and the guidance provided in the OECD MRL Calculator. The recommendation for MRLs was also based upon previously reviewed grape field trial data, and guidance provided in Regulatory Proposal PRO2005-04, *Guidance for Setting Pesticide Maximum Residue Limits Based on Field Trial Data*.

Table A1 Summary of Field Trial and Processing Data Used to Support MRLs

Commodity	Application Method/ Total Application Rate (g a.i./ha)[1]	Preharvest Interval (days)	Maximum Residues (ppm)	Minimum Residues (ppm)	Experimental Processing Factor
Hops cones, dried	Foliar/ 683-712	1-2	25.34	15.72	--
Cantaloupe	Foliar/ 993-1049	0	0.332	0.038	--
Cucumber	Foliar/ 1002-1035	0	0.168	0.046	--
Summer squash	Foliar/ 993-1168	0	0.357	0.067	--
Cherries	Foliar/ 645-702	6-8	1.17	0.280	--
Peaches	Foliar/ 654-684	6-8	0.520	0.041	--
Bell peppers	1005-1017/ Foliar	7	0.271	0.083	--

Commodity	Application Method/ Total Application Rate (g a.i./ha)[1]	Preharvest Interval (days)	Maximum Residues (ppm)	Minimum Residues (ppm)	Experimental Processing Factor
Non-bell peppers	991-1014/ Foliar	7	0.296	0.062	--
Tomatoes	999-1383/ Foliar	6-8	0.188	<0.01	0.39X (paste) 0.84X (puree)
Apples	995-1027/ Foliar	6-7	0.847	0.0662	0.21X (raw juice) 4.46X (apple sauce)
Grapes	Foliar/ 1990-2060	14	3.20	0.02	--

[1] g a.i./ha = grams of active ingredient per hectare

Following the review of all available data, MRLs as proposed in Table 1 are recommended to cover residues of metrafenone. Residues of metrafenone in these commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.